

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 1. (Previously Presented) A circuit board comprising a mechanism
2 for provably disabling the circuit board, comprising:

3 a key area of a substrate of the circuit board, wherein the key area
4 comprises an identification mechanism which uniquely identifies the key area as
5 being originally attached to the circuit board;

6 one or more removal features in the substrate of the circuit board aligned
7 about the key area for breaking the substrate in a predefined boundary between
8 the key area and the circuit board to permanently detach the key area from the
9 circuit board, wherein the removal features include at least one of slits, slots,
10 gaps, channels, bores, or weakened or thinned parts; and

11 a signal trace on the circuit board, wherein a portion of the signal trace is
12 routed from the circuit board through the key area and back to the circuit board,
13 wherein the signal trace conducts a signal required for a normal operation of the
14 circuit board, and wherein the signal trace is permanently severed when the key
15 area is detached from the circuit board.

1 2. (Previously Presented) The circuit board of claim 1, wherein said
2 signal trace comprises a wire trace.

1 3. (Cancelled)

1 4. (Cancelled)

1 5. (Cancelled)

1 6. (Cancelled)

1 7. (Currently Amended) The circuit board of claim 1, wherein the
2 identification mechanism a portion of the key area is encapsulated in a hardening
3 material to protect the identification mechanism key area from being easily
4 manipulated.

1 8-33. (Cancelled)

1 34. (Currently amended) A circuit board assembly to provably
2 disable a configured for provably disabling the circuit board, the assembly
3 comprising:

4 a circuit board comprising a substrate which includes a specified area of
5 the substrate that is used as a tab, wherein the tab comprises:
6 a proximate end connected to the circuit board;
7 a distal end opposite the proximate end; and
8 two opposing sides separated from the assembly by gaps;
9 an identification module situated on the tab, wherein the identification
10 module comprises an electronic identification chip, wherein the electronic
11 identification chip includes an identification code that uniquely identifies the tab
12 as being originally attached to the circuit board; and
13 a signal conductor extending from the circuit board through the tab and
14 back to the circuit board, wherein the signal conductor conveys and configured to
15 convey a signal required for a normal operation of the circuit board when the
16 assembly is powered;
17 wherein the tab is removed by breaking the substrate at or near the

18 proximate end; in the specified area;

19 wherein removal of the tab at or near the proximate end so as to separate
20 said identification module from the assembly causes the signal conductor on the
21 tab to be decoupled from the signal conductor on the circuit board; and
22 wherein the signal conductor is permanently severed when the tab is
23 detached from the circuit board.

1 35. (Previously presented) The circuit board assembly of claim 34,
2 wherein the circuit board assembly cannot be powered if the signal conductor on
3 the tab is decoupled from the signal conductor on the circuit board.

1 36. (Previously presented) The circuit board assembly of claim 34,
2 wherein the circuit board becomes at least partially non-functional when the
3 signal conductor on the tab is decoupled from the signal conductor on the circuit
4 board.

1 37. (Currently Amended) The circuit board assembly of claim 34,
2 wherein the identification module further comprises a hologram.

1 38. (Previously Presented) The circuit board assembly of claim 34,
2 wherein the identification module further comprises a barcode.

1 39. (Previously Presented) The circuit board assembly of claim 34,
2 wherein the identification module further comprises a sequence of characters.

1 40. (Cancelled)

1 41. (Previously Presented) The circuit board assembly of claim 34,
2 further comprising an integrated circuit on the circuit board, wherein the

- 3 integrated circuit disables at least some operations of the circuit board if the tab is
4 decoupled from the signal conductor.

1 42. (Previously Presented) The circuit board assembly of claim 34,
2 wherein the signal conductor does not extend to the distal end of the tab.

1 43. (Currently amended) A circuit board assembly comprising:
2 a substrate which includes:
3 a specified area of the substrate that is used as a key; and
4 a signal conductor which conducts a signal required for a normal
5 operation of the circuit board, and wherein a portion of the signal
6 conductor is routed from the circuit board through the key and back to the
7 circuit board;

8 wherein the key comprises an identification module, wherein the
9 identification module includes one of a barcode, a hologram, an etched
10 identification string, or an electronic identification chip that uniquely identifies
11 the key as being originally attached to the circuit board;

12 wherein the key is removed by breaking the substrate in at a boundary of
13 the specified ~~area~~area,

14 wherein while said key is removably connected to the circuit board
15 assembly a plurality of slits, slots, gaps, channels, bores, or weakened or thinned
16 parts that are defined between the circuit board assembly and said key;

17 wherein removal of the key from the circuit board assembly causes said
18 portion of the signal conductor on the key to be decoupled from the signal
19 conductor on the circuit board assembly; and

20 wherein the signal conductor is permanently severed when the key is
21 detached from the circuit board.

1 44. (Currently amended) A circuit board comprising:

2 a substrate which includes a specified area of the substrate that is used as a
3 key, wherein the key is removably connected to the circuit board, and wherein the
4 key comprises:

5 a portion of a signal conductor ~~configured~~ to conduct a signal
6 between the key and the circuit board, wherein the signal is required for a
7 normal operation of the circuit board, and wherein the signal conductor is
8 routed from the circuit board through the key and back to the circuit
9 board; and

10 an identification module comprising an electronic identification
11 chip, wherein the electronic identification chip includes an identification
12 code that uniquely identifies the key as being originally attached to the
13 circuit board;

14 wherein the key is removed by breaking the substrate in a portion of the
15 specified area, wherein the portion of the specified area is connected to a first
16 portion of the circuit board; area;

17 wherein the key is removably connected to the first portion a first portion
18 of the circuit board but is separated from other portions of the circuit board by
19 one or more removal features, wherein the removal features include at least one of
20 slits, slots, gaps, channels, bores, or weakened or thinned parts;

21 wherein the removal features facilitate detachment of the key from the
22 circuit board; and wherein the signal conductor is permanently severed when the
23 key is removed from the circuit board.

1 45. (Previously Presented) The circuit board assembly of claim 43,
2 wherein an integrated circuit on the circuit board detects the absence of
3 the key when the key is removed; and

4 wherein the integrated circuit disables at least some operations of the
5 circuit board if the key is removed.

1 46. (Previously Presented) The circuit board assembly of claim 43,
2 wherein the electronic identification chip includes an identification code that
3 uniquely identifies the key.

1 47. (Previously Presented) The circuit board of claim 44, wherein the
2 identification code can only be read from the electronic identification chip after
3 the key is detached from the circuit board.

1 48. (Previously Presented) The circuit board of claim 44, wherein an
2 integrated circuit on the circuit board disables at least some operations of the
3 circuit board if the key is detached from the circuit board.

1 49. (Previously Presented) The circuit board of claim 1, wherein the
2 identification mechanism includes one of a barcode, a hologram, an etched
3 identification string, or an electronic identification chip.

1 50. (Previously Presented) The circuit board of claim 49, wherein the
2 electronic identification chip includes an identification code that uniquely
3 identifies the key area as being originally attached to the circuit board.

1 51. (Previously Presented) The circuit board of claim 50, wherein the
2 identification code can only be read from the electronic identification chip after
3 the key is detached from the circuit board.

1 52. (Previously Presented) The circuit board of claim 1, comprising an
2 integrated circuit which detects the absence of the key when the key is detached
3 from the circuit board.

1 53. (Previously Presented) The circuit board of claim 52, wherein the
2 integrated circuit tests if the signal trace is intact and disables at least some

3 operations of the circuit board if the key area has been detached from the circuit
4 board.

1 54. (Previously Presented) The circuit board of claim 1, wherein said
2 signal trace comprises an optical trace.